

RECEIVED

1631

AUG 09 2001

TECH CENTER 1600/2900

Patent
264/036

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Donald E. Ackley et al.

Serial No.: 09/849,119

Filed: May 4, 2001

For: SYSTEMS AND METHODS FOR THE
ACTIVE ELECTRONIC CONTROL OF
BIOLOGICAL REACTIONS

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

#2
Plunkett
8/10/01

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

The accompanying Form PTO-1449 provides a listing of documents which may be relevant to the subject application. A copy of each of these documents was provided in the parent applications. Accordingly, Applicants will provide duplicate copies in respect of the present case only if the Examiner so desires. It is requested that the Examiner fully consider the art cited in the accompanying Form 1449, initial the left-most column of the form adjacent each cited reference, and

OC-88571.1

CERTIFICATE OF MAILING
(37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

August 01, 2001
Date of Deposit

Adriana Mojarro

Name of Person Mailing Paper

Signature of Person Mailing Paper

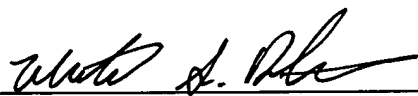
return a copy for Applicants' records. It is further requested that the art be cited on the cover of any patent issuing from the subject application.

This statement should not be construed as a representation that more material information does not exist or that an exhaustive search of the relevant art has been made. Nor does this statement constitute an admission by Applicants or Applicants' agent that the information provided herein is necessarily prior art to Applicants' invention. Moreover, Applicants reserve the right to establish the patentability of the claimed invention over any of the listed documents should they be applied there-against as references.

Respectfully submitted,

LYON & LYON LLP

Dated: August 1, 2001

By: 
Michael S. Davidson
Reg. No. 43,577

MSD/am
633 West Fifth Street, Suite 4700
Los Angeles, California 90071-2066
(949) 567-2300 or (213) 489-1600

LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT:
Donald E. Ackley et al.FILING DATE:
May 4, 2001GROUP:
Not Yet Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBC LASS	FILINGDATE
	AA	3,950,738	4/76	Hayashi et al.	365	185	7/74
	AB	3,995,190	11/76	Salgo	313	391	12/75
	AC	4,283,773	8/81	Daughton et al.	364	132	4/79
	AD	4,563,419	1/86	Ranki et al.	435	6	12/83
	AE	4,580,895	4/86	Patel	356	39	10/83
	AF	4,584,075	4/86	Goldstein	204	522	11/84
	AG	4,594,135	6/86	Goldstein	204	551	2/85
	AH	4,751,177	6/88	Stabinsky	435	6	6/85
	AI	4,787,963	11/88	MacConnell	204	450	5/87
	AJ	4,807,161	2/89	Comfort et al.	364	550	12/87
	AK	4,816,418	3/89	Mack et al.	436	518	7/85
	AL	4,822,566	4/89	Newman	422	82	5/87
	AM	4,828,979	5/89	Klevan et al.	435	6	11/84
	AN	4,908,112	3/90	Pace	210	198	6/88
	AO	5,063,081	11/91	Cozzette et al.	435	4	8/90
	AP	5,074,977	12/91	Cheung et al.	205	775	10/90
	AQ	5,075,077	12/91	Durley, III et al.	422	56	8/88
	AR	5,096,669	3/92	Lauks et al.	422	61	9/88
	AS	5,096,807	3/92	Leaback	435	6	12/89
	AT	5,125,748	6/92	Bjornson et al.	356	414	5/91
	AU	5,126,022	6/92	Soane et al.	204	458	2/90
	AV	5,143,854	9/92	Pirrung et al.	436	518	3/90
	AW	5,164,319	11/92	Hafeman et al.	435	287	11/89
	AX	5,166,063	11/92	Johnson	435	173	6/90
	AY	5,200,051	4/93	Cozzette et al.	204	403	11/89
	AZ	5,202,231	4/93	Drmanac et al.	435	6	6/91
	BA	5,219,726	6/93	Evans	435	6	6/89
	BB	5,227,265	7/93	DeBoer et al.	430	41	11/90
	BC	5,234,566	8/93	Osman et al.	204	403	4/91
	BD	5,242,797	9/93	Hirshfeld	435	6	1/92
	BE	5,304,487	4/94	Wilding et al.	435	29	5/92
	BF	5,312,527	5/94	Mikkelsen et al.	205	777	10/92
	BG	5,433,819	7/95	McMeen	216	20	5/93
	BH	5,434,049	7/95	Okano et al.	435	6	2/93
	BI	5,445,525	8/95	Broadbent et al.	439	64	5/94
	BJ	5,516,698	5/96	Begg et al.	436	89	4/92

OC-88563.1

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT:
Donald E. Ackley et al.FILING DATE:
May 4, 2001GROUP:
Not Yet Assigned

BK	5,527,670	6/96	Stanley	435	6	8/94
BL	5,527,681	6/96	Holmes	435	6	11/92
BM	5,605,662	2/97	Heller et al.	422	68	11/93
BN	5,632,957	5/97	Heller et al.	422	68	9/94
BO	5,653,939	8/97	Hollis et al.	422	50	8/95
BP	5,677,195	10/97	Winkler et al.	436	518	11/92
BQ	5,681,751	10/97	Begg et al.	436	89	5/95
BR	5,849,486	12/98	Heller et al.	435	6	8/96

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBC LASS	TRANSLATION YES	NO
BS	0228075	7/87	EP (Dattagupta et al.)				
BT	2247889	3/92	GB (Stanley)				
BU	WO95/07363	3/95	PCT (Konrad)				
BV	WO90/01564	2/90	PCT (Adams et al.)				
BW	WO89/01159	2/89	PCT (Cornell et al.)				
BX	WO93/22678	11/93	PCT (Hollis)				
BY	WO86/03782	7/86	PCT (Malcolm et al.)				
BZ	WO89/10977	11/89	PCT (Southern)				
CA	WO88/08528	11/88	PCT (Stanbro et al.)				
CB	WO92/04470	3/92	PCT (Stanley)				
CC	WO98/51819	11/98	PCT (Heller et al.)				
CD	WO96/01836	1/96	PCT (Heller et al.)				
CE	WO98/01758	1/98	PCT (Kovacs)				
CF	WO97/12030	4/97	PCT (Heller et al.)				
CG	2156074	10/85	UK (Palva et al.)				
CH	57087	87	Yugoslavia (Drmanac)				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CI	Abrams et al. "Comprehensive Detection of Single Base Changes In Human Genomic DNA Using Denaturing Gradient Gel Electrophoresis & a GC Clamp". <i>Genomics</i> , 7, 1990, 463-475
CJ	Anand and Southern "Pulsed Field Gel Electrophoresis," <u>Gel Electrophoresis of Nucleic Acids - A Practical Approach</u> , 2d. Ed., D. Rickwood and B.D. Hames (New York: IRL Press 1990), pp 101-123
CK	Anderson and Young, "Quantitative Filter Hybridization," <u>Nucleic Acid Hybridization - A Practical Approach</u> , Eds. B.D. Hames and S.J. Higgins (Washington, D.C. : IRL Press 1985) pp 73-111
CL	Bains, "Setting a Sequence to Sequence a Sequence," <u>Bio/Technology</u> , 10:757-758 (1992)
CM	Barinaga, "Will 'DNA Chip' Speed Genome Initiative?", <u>Science</u> , 253:1489 (1991)
CN	Beattie et al., "Genosensor Technology," <u>The 1992 San Diego Conference: Genetic Recognition</u> , pp 1-5 (Nov, 1992)
CO	Beltz et al., "Isolation of Multigene Families and Determination of Homologies by Filter Hybridization Methods," <u>Methods in Enzymology</u> , 100:266-285 (1983)

OC-88563.1

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT

AUG 06 2001

(Use several sheets if necessary)

APPLICANT:

Donald E. Ackley et al.

FILING DATE:

May 4, 2001

GROUP:

Not Yet Assigned

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CP	Brown et al. "Electrochemically Induced Adsorption of Radio-Labelled DNA on Gold and HOPG Substrates for STM Investigations". <i>Ultramicroscopy</i> , 38, 1991, 253-264
CQ	Conner et al., "Detection of Sick Cell β^3 -Globin Allele by Hybridization With Synthetic Oligonucleotides," <i>Proc. Natl. Acad. Sci. USA</i> , 80:278-282 (1983)
CR	Drmanac et al., "Sequencing of Megabase Plus DNA by Hybridization: Theory of the Method," <i>Genomics</i> , 4:114-128 (1989)
CS	Drmanac et al., "DNA Sequence Determination by Hybridization: A Strategy for Efficient Large-Scale Sequencing," <i>Science</i> , 260: 1649-1652 (1993)
CT	Eggers et al. "Biochip Technology Development", BioChip Technology Development, Lincoln Laboratory Technical Report 901, Nov. 9, 1990
CU	Fiaccabrino et al., "Array of Individually Addressable Microelectrodes", <i>Sensors and Actuators B</i> , 18-19 (1994) 675-677
CV	Fodor et al., "Multiplexed Biochemical Assays With Biological Chips," <i>Nature</i> , 364:555-556 (1993)
CW	Fodor et al., "Light-Directed, Spatially Addressable Parallel Chemical Synthesis," <i>Science</i> , 251:767-773 (1992)
CX	Horejsi, "Some Theoretical Aspects of Affinity Electrophoresis," <i>Journal of Chromatography</i> , 178:1-13 (1979)
CY	Horejsi et al., "Determination of Dissociation Constants of Lectin Sugar Complexes by Means of Affinity Electrophoresis, <i>Biochimica et Biophysica Acta</i> , 499:200-300 (1977)
CZ	Kakerow et al., "A Monolithic Sensor Array of Individually Addressable Microelectrodes", <i>Sensors and Actuators A</i> , 43 (1994) 296-301
DA	Mathews, Kricka. "Analytical Strategies For The Use Of DNA Probes". <i>Analytical Biochemistry</i> , 169, 1988, 1-25
DB	Palecek. "New Trends in Electrochemical Analysis of Nucleic Acids". <i>Bioelectrochemistry and Bioenergetics</i> , 20, 1988, 179-194
DC	Ranki et al., "Sandwich Hybridization as a Convenient Method for the Detection of Nucleic Acids in Crude Samples," <i>Gene</i> , 21:77-85 (1983)
DD	Saiki, "Amplification of Genomic DNA," <i>PCR Protocols: A Guide to Methods and Applications</i> , (Academic Press, Inc. 1990), pp 13-20
DE	Southern et al., "Analyzing and Comparing Nucleic Acid Sequences by Hybridization to Arrays of Oligonucleotides Evaluation Using Experimental Models," <i>Genomics</i> , 13:1008-1017 (1992)
DF	Strezoska et al., "DNA Sequencing by Hybridization: 100 Bases Read by a Non-Gel-Based Method", <i>Proc. Natl. Acad. Sci. USA</i> , 88:10089-93 (1991)
DG	Wallace et al., "Hybridization of Synthetic Oligodeoxynucleotides to ϕ x 174 DNA: The Effect of Single Base Pair Mismatch," <i>Nucleic Acid Res.</i> , 6:3543-3557 (1979)
DH	Washizu, "Electrostatic Manipulation of Biological Objects," <i>Journal of Electrostatics</i> , 25:109-123 (1990)
DI	Washizu and Kurosawa, "Electrostatic Manipulation of DNA in Microfabricated Structures," <i>IEEE Transactions on Industry Applications</i> , 26:1165-1172 (1990)
DJ	Brown et al., "Electrochemically Induced Adsorption of Radio-Labelled DNA on Gold and HOPG Substrates for STM Investigations", <i>Ultramicroscopy</i> , 38 (1991) pp 253-264
DK	Palacek, "New Trends in Electrochemical Analysis of Nucleic Acids", <i>Bioelectrochemistry and Bioenergetics</i> , 20 (1988) pp 179-194

OC-88563.1

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.